DISCUSSION OF:

MARKETPLACE LENDING: A NEW BANKING PARADIGM

by Boris Vallee and Yao Zeng

Discussion by:

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April 2018, Texas Finance Festival

Already Forthcoming

- The paper has already been forthcoming, so my job is not really to talk to details of improving the paper…
  - But rather what the audience should remember as takeaways
  - And how to place the contribution in setting.

- Vallee, Boris, and Yao Zeng. "Marketplace Lending: A New Banking Paradigm?" January 2018. In-Principle Acceptance to the *Review of Financial Studies*.

Two Empirical Takeaways

1. Sophisticated investors do better

2. Sophisticated investors do better because of their use of the data feed of information on borrowers

   Experiment: Diff-in-diff around the cutting back of 44 data items
   from 100 to 56 on LC in Dec 2104

Two Empirical Takeaways

Big Picture:

The incidence of returns in platform investing is surely a first order question.

- The whole point of the JOBS Act was this.
- Later Argue: Less important on lending platforms

Likewise, whether this incidence is about data usage (skill) versus cognitive weaknesses by the naïve is also of primary importance.

Table 1: Summary Statistics

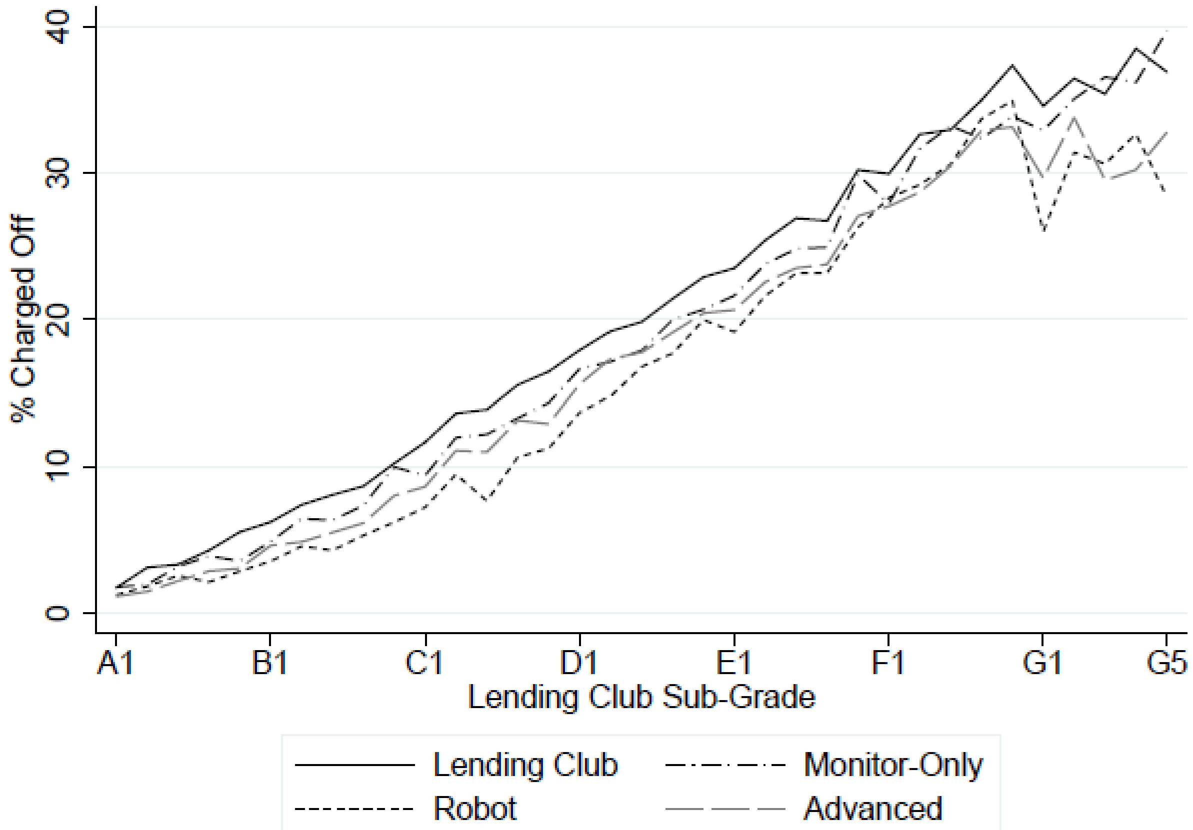
	Number (1)	Total Amount Invested (2)	Median Amount Invested (3)	Mean Amount Invested (4)
Lending Club				
Total	7,368	138,633,952	3,050	18,815.7
Regular	4,435	56,692,279	1,600	12,783.6
Advanced	2,933	81,703,628	5,925	27,936.8
Monitor-Only	636	13,309,525	4,650	20,926.9

- **Advanced investors**: most sophisticated, largest
- **Monitor** however seem also sophisticated, large. Authors argue more passive. But these are accounts not trading; just using these portfolios as learning.
- **Robot / Regular** seem most like regular folks (not institutions), with median investment amount of $1600.

“Sophisticated Investors Do Better”: Main Results

Table 3: Screening Performance

	Prob(Charged-Off)		
Account Type	Robot (1)	Advanced (2)	Monitor (3)
Account Type	-0.031*** (-10.84)	-0.044*** (-18.04)	-0.008*** (-4.68)
Month FE	Yes	Yes	Yes
Interest Rate FE	Yes	Yes	Yes
Cluster	Int. Rate	Int. Rate	Int. Rate
Observations	365,691	365,691	365,691
Pseudo R^2	0.062	0.064	0.061



- Why do we never see these type indicators in the same estimation?
- I’m not entirely convinced here

"Sophisticated Investors Do Better Because of Use of Data": Main Results

Table 4: Difference in Difference Analysis

	-2/+2 months Window (3)
Robot Account	-0.074***
	(-6.98)
Robot Account x Post	0.037**
	(2.68)
Advanced Account	-0.053***
	(-6.14)
Advanced Account x Post	0.015
	(1.42)
Monitor-Only Account	0.001
	(0.16)
Monitor-Only Account x Post	0.016
	(1.71)
Month FE	Yes
Interest Rate FE	Yes
Cluster	Int. Rate
Observations	37,615
Pseudo R^2	0.060

- Dependent variable: Loan Charge-off
- Doesn't this say that ex post to the experiment the regular folks (robot investors) are those most hurt by the cutting back on data fields to the data feed
- Possibility: speaks to ex ante use of data
  - Interesting but not the story pitched here

The Experiment

LendingRobot webpage concerning the Dec 2014 withdrawal of 44 data fields:

- "Lending Club recently announced changes to the data it makes available to investors. The changes include removing 44 fields from the data made available for every loan.
- Of those fields, only one is currently used as a filtering criterion on LendingRobot: "New Accounts (24 months)".
- If you use this criterion in your investment rules, you should modify them before December 10th 2014.
- Investors that rely on LendingRobot's statistical model (using "expected return" in their rules) don't have to do anything – our model is not affected by the changes."

Placing the contribution in marketplace setting

1. Title “a New Banking Paradigm”
    - (Not just this paper)
    - Household finance ≠ retail banking
    - The counterfactual here is credit cards, not bank lending
    - Why do I care?

        Because we seem caught-up on figuring out how to (for example) “bank the unbanked” when in fact a bank may not be optimal financial services for many/most people

Lending Club Stats from Morse (2015, Annual Review of F.E.)

Type of Loan	Annual Income	Loan Amount	Interest Rate	Term Months	Count	% of Sample	Payments
Car	65,993	8,556	0.134	39.2	185	0.8%	$267.29
Credit Card	74,017	15,406	0.134	39.8	5,680	25.0%	$475.58
Debt Consolidation	75,468	16,350	0.141	41.6	13,797	60.8%	$492.27
Home Improvement	87,893	15,056	0.129	41.8	1,120	4.9%	$444.33
House	82,617	16,912	0.139	41.7	138	0.6%	$506.25
Major Purchase	78,365	9,740	0.129	39.4	443	2.0%	$301.56
Medical	73,325	8,375	0.191	38.0	122	0.5%	$289.11
Moving	76,911	8,325	0.193	37.6	73	0.3%	$290.08
Other	68,913	9,702	0.197	40.0	696	3.1%	$324.56
Renewable Energy	99,977	12,602	0.194	42.5	11	0.0%	$401.91
Small Business	92,278	17,023	0.193	40.9	253	1.1%	$557.48
Vacation	63,913	6,003	0.190	36.9	55	0.2%	$211.76
Wedding	70,315	11,703	0.194	39.4	134	0.6%	$394.56
Total	75,674	15,542	0.141	41.0	22,707	100.0%	$473.86

These loans are overwhelmingly debt consolidations (credit card debt generally).

Placing the contribution in marketplace setting

2. Introduction 1st sentence:

   “Platforms... have been rapidly gaining market share in consumer lending over the last decade”

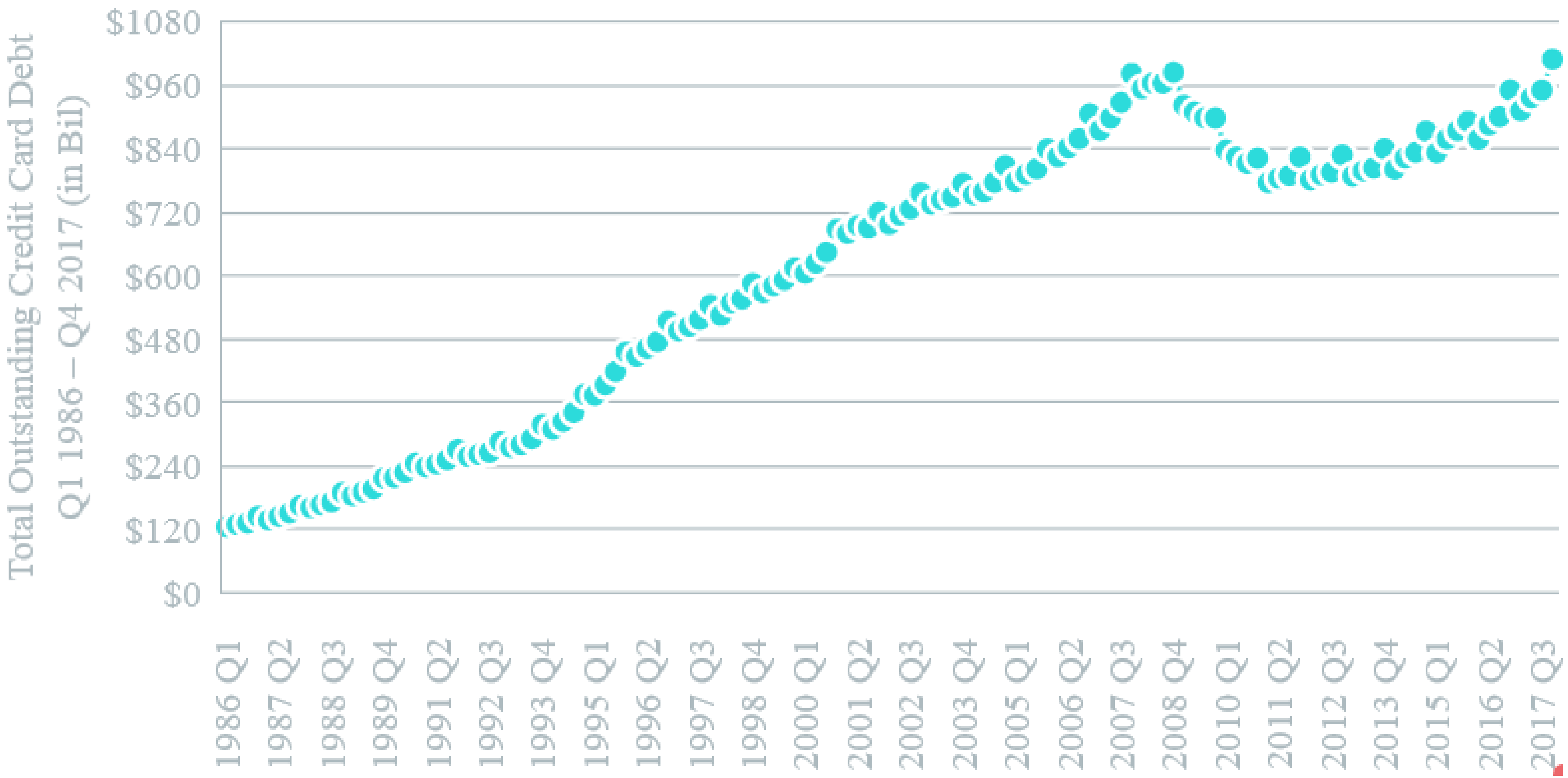
   - This is only true in mortgages
   - Mortgage platforms are not funded by a marketplace system

Introduction, continued:

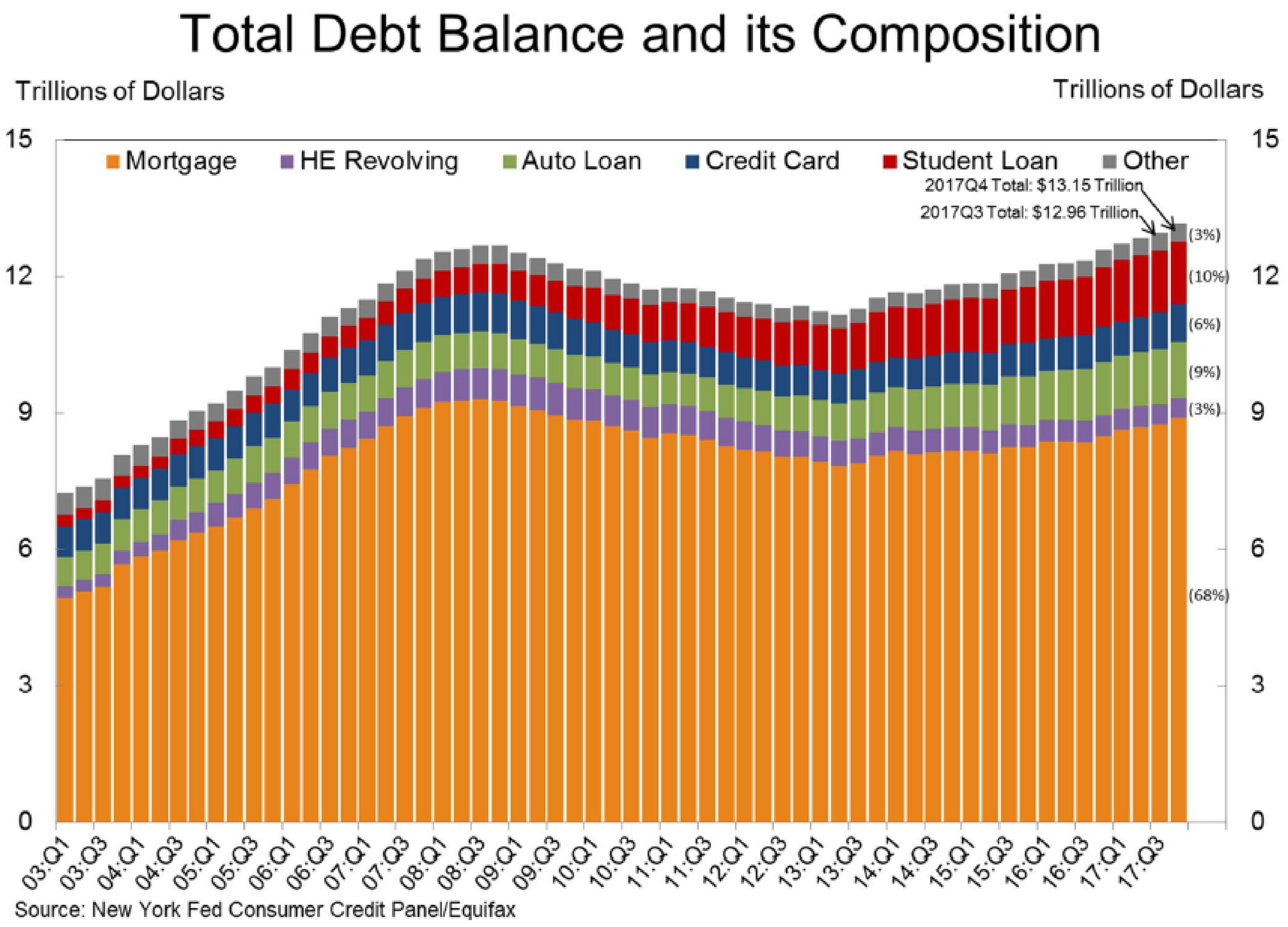
“The innovation on the borrower side relies mainly on streamlining an online application process that uses low-cost information technology to collect standardized information from dispersed individual borrowers on a large scale” AGREED

“However, the true breakthrough that marketplace lending creates lies on the investor side.” *DISAGREE*

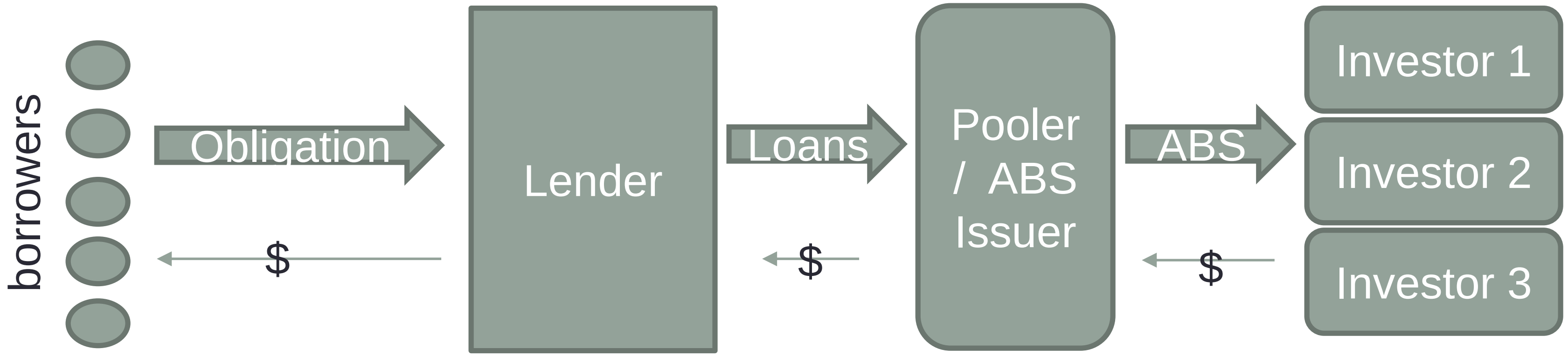
WalletHub: At more than $1 trillion, outstanding credit card debt is at the highest point ever. Lending Club & Prosper are in the low tens of billions of float, combined.



NYFEd:
CC balances increased by $26 billion in 2017

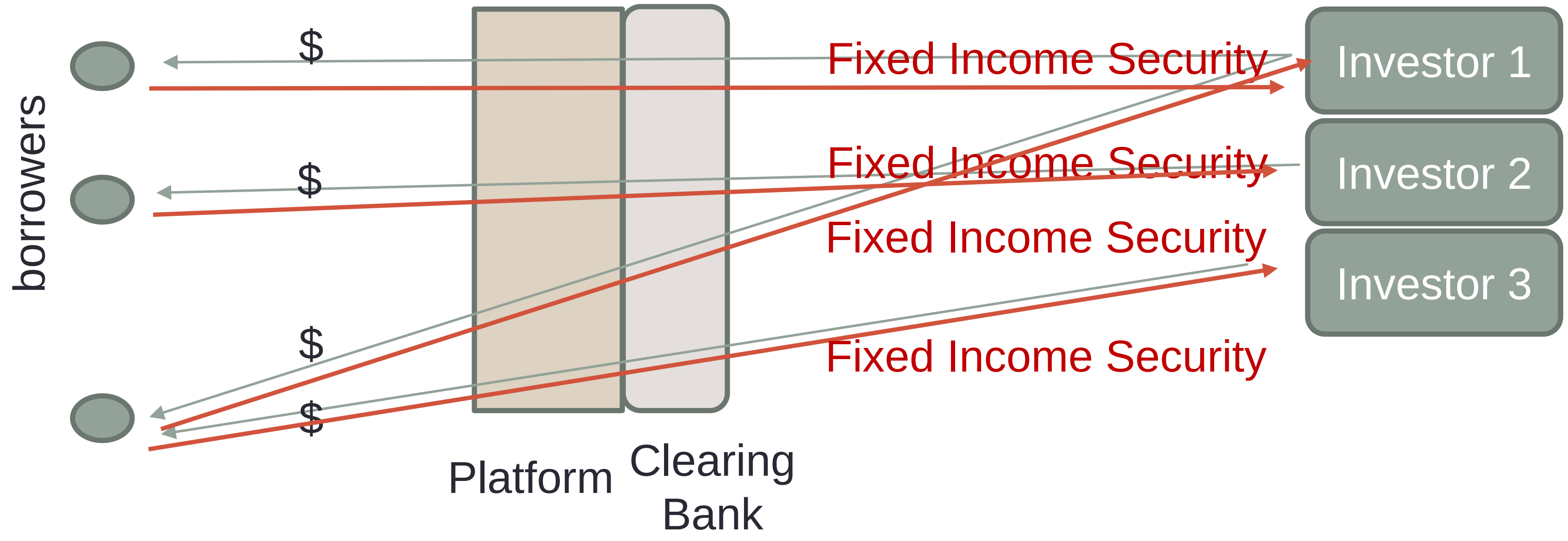


Traditional Lending Model: e.g., credit cards



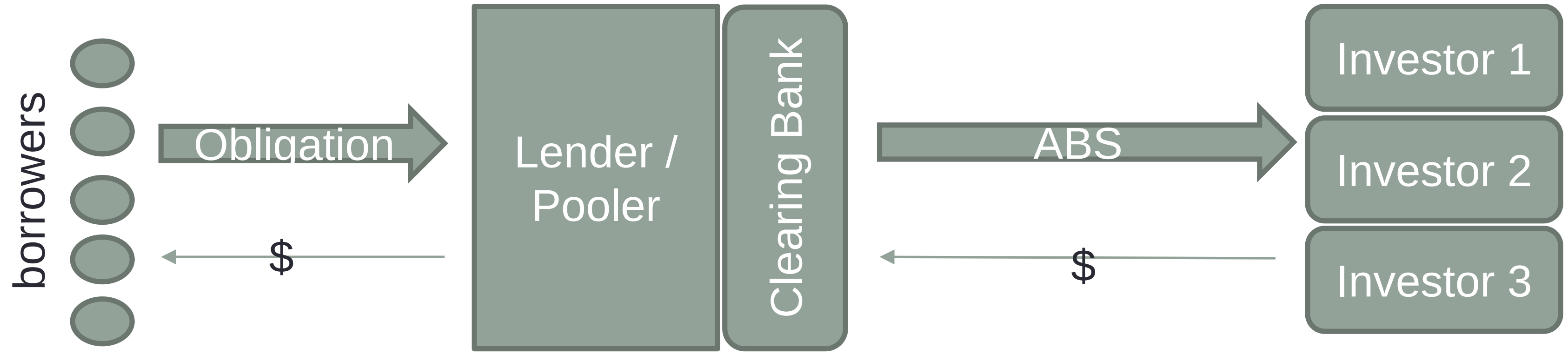
What really does the word disintermediation mean?

P2P Platforms: Disintermediation



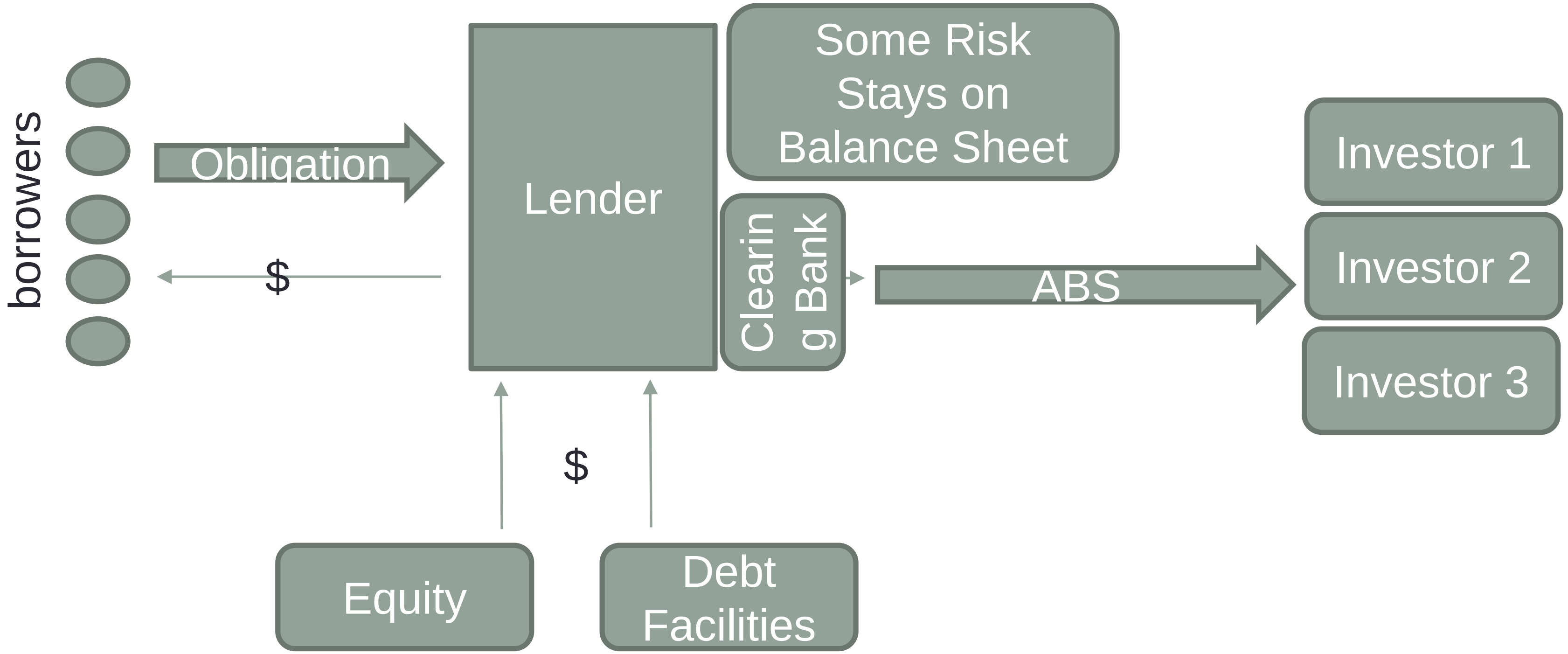
Disintermediation is in removing investment bank that issues ABS

Asset Packager Platforms: Disintermediation



Disintermediation is still in removing investment bank that issues ABS

Partial Balance Sheet Model



Punchline

Contributions here:

- VERY IMPORTANT to study incidence of returns by different investors as platform investing becomes mainstream
  - Lending platforms are one forum, although increasingly less-so
- VERY IMPORTANT to understand what informational advantages Big Data bring, and who can realize these benefits
- Quibbles on what this paper establishes, but great choice of topic
  - I’m sure punchline will be well received.